

REGULATION NO. 5

PARTICULATE EMISSIONS FROM INDUSTRIAL PROCESS OPERATIONS

02/01/81

Section 1 - General Provisions

- 1.1 The emission of particulate matter from industrial process equipment shall be controlled to a limit that shall meet the ambient air quality requirements.
- 1.2 The provisions of this Regulation shall not apply to indirect heat exchangers which shall be controlled by Regulation No. 4.
- 1.3 For all tables in this Regulation, unless otherwise indicated, the emission limitation for a process weight rate between any two consecutive process weight rates shall be determined by linear interpolation.
- 1.4 For all tables in this Regulation, unless otherwise indicated, the emission limitation for process weight rate above the maximum process weight rate or below the minimum process weight rate shall be determined by linear extrapolation.
- 1.5 For purposes of this Regulation, the allowable mass emission rate of particulate matter shall be determined for individual units of equipment.
- 1.6 For operations involving similar units which are manifolded to a common stack, control techniques shall be such that no unit is emitting particulate matter at a rate which is in excess of the mass emission rate allowed by this Regulation.
- 1.7 The provisions of this Regulation shall not apply to the start-up and shutdown of equipment which operates continuously or in an extended steady state when emissions from such equipment during start-up and shutdown are governed by an operation permit issued pursuant to the provisions of Section 2, Regulation No. 2.

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Section 2 - General Restrictions

- 2.1 No person shall cause or allow particulate emissions into the atmosphere from any source not provided for in subsequent sections of this Regulation in excess of 0.2 grains per standard cubic foot.

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Section 3 - Restrictions on Hot Mix Asphalt Batching Operations

- 3.1 No person shall cause or allow particulate emissions from a hot mix asphalt batching plant into the atmosphere in excess of the quantity as listed in Table 1.

TABLE 1

ALLOWABLE MASS EMISSION RATE FROM HOT MIX ASPHALT BATCHING OPERATION

| Process Weight Rate (Pounds Per Hour) | Stack Emission Rate (Pounds Per Hour) |
|--|--|
| 10,000 | 10 |
| 20,000 | 16 |
| 30,000 | 22 |
| 40,000 | 28 |
| 50,000 | 31 |
| 100,000 | 33 |
| 200,000 | 37 |
| 300,000 | 40 |
| 400,000 | 43 |
| 500,000 | 47 |
| 600,000 | 50 |

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Section 4 - Restrictions on Secondary Metal Operations

- 4.1 No person shall cause or allow particulate emissions from secondary metal operations into the atmosphere in excess of the quantity as listed in Table 2.

TABLE 2

ALLOWABLE MASS EMISSION RATE FROM SECONDARY METAL OPERATIONS

| Process Weight Rate (Pounds Per Hour) | Stack Emission Rate (Pounds Per Hour) |
|--|--|
| 1,000 | 0.75 |
| 2,000 | 1.50 |

| | |
|--------|-------|
| 3,000 | 2.25 |
| 4,000 | 3.00 |
| 5,000 | 3.75 |
| 6,000 | 4.50 |
| 7,000 | 5.25 |
| 8,000 | 6.00 |
| 9,000 | 6.75 |
| 10,000 | 7.50 |
| 12,000 | 9.00 |
| 16,000 | 12.00 |
| 18,000 | 13.50 |
| 20,000 | 15.00 |
| 30,000 | 22.50 |
| 40,000 | 30.00 |
| 50,000 | 37.50 |

- 4.2 The provisions of Section 4.1 shall not apply to electric arc furnaces, and their associated dust-handling equipment, with a capacity of more than 100 tons.

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Section 5 - Restrictions on Petroleum Refining Operations

- 5.1 No person shall cause or allow particulate emissions from catalytic cracking operations into the atmosphere in excess of the quantities as indicated in Table 3.

TABLE 3

ALLOWABLE MASS EMISSION RATE FROM CATALYTIC CRACKING OPERATIONS

| Coke Burn-Off Rate (Pounds Per Hour) | Mass Emission Rate (Pounds Per Hour) |
|---|---|
| 7,000 | 50 |
| 14,000 | 100 |
| 21,000 | 150 |
| 28,000 | 200 |
| 42,000 | 300 |
| 56,000 | 400 |
| 70,000 | 500 |

For the purpose of interpolation and extrapolation calculations, "Coke Burn- Off Rate" shall be construed to be equivalent to "Process Weight Rate."

- 5.2 No person shall cause or allow particulate emissions from fluid coking operations into the atmosphere in excess of the quantities as indicated in Table 4.

TABLE 4

ALLOWABLE MASS EMISSION RATE
FROM FLUID COKING OPERATIONS

| Process Weight Rate (Barrels Per Day of Fresh Feed) | Mass Emission Rate (Pounds Per Hour) |
|---|---|
| 5,000 | 15 |
| 10,000 | 30 |
| 15,000 | 50 |
| 20,000 | 70 |
| 30,000 | 100 |
| 40,000 | 125 |
| 50,000 | 150 |

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Section 6 - Restrictions on Prill Tower Operation

- 6.1 No person shall cause or allow particulate emissions from prilling operations into the atmosphere in excess of the quantities as indicated in Table 5.

TABLE 5

ALLOWABLE MASS EMISSIONS RATE
FROM PRILLING OPERATIONS

| Process Weight Rate (Pounds Per Hour) | Mass Emission Rate (Pounds Per Hour) |
|--|---|
| 5,000 | 25 |
| 10,000 | 50 |
| 15,000 | 75 |

| | |
|---------|-----|
| 20,000 | 100 |
| 25,000 | 125 |
| 50,000 | 250 |
| 75,000 | 375 |
| 100,000 | 500 |

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Section 7 - Control of Potentially Hazardous Particulate Matter

- 7.1 Persons responsible for a source operation from which potentially hazardous particulate matter may be emitted such as, but not limited to, lead, arsenic, beryllium, silica, asbestos, and other such materials shall list such contaminants and their exit concentrations in a written report to the Department. The Department shall assign emission limits on an individual basis.

